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## Academic procrastinators, strategic delayers and something betwixt and between: An interview study

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### Abstract

*The study explored university undergraduates' dilatory behaviour, more precisely, procrastination and strategic delaying. Using qualitative interview data, we applied a theory-driven and person-oriented approach to test the theoretical model of Klingsieck (2013). The sample consisted of 28 Bachelor students whose study pace had been slow during their first university year. Three student profiles emerged. The first concerned strategic delay and was represented by motivated students with strong self-efficacy beliefs who had intentionally postponed their studying. The second consisted of students whose delaying was unnecessary in nature; these students had minor self-regulation problems but were still motivated to study. The third profile consisted of procrastinating students who lacked self-regulation skills and had weaker self-efficacy beliefs. The results indicate that dilatory behaviour can vary from strategic delay to dysfunctional procrastination, and that different factors are related to these various types of dilatory behaviour. This study adds to our theoretical understanding of academic procrastination by empirically testing a new theoretical model of procrastination. In addition, the study shows the value of using a qualitative approach in understanding the phenomenon of dilatory behaviour.*

**Keywords:** academic procrastination; strategic delay; dilatory behaviour; university student

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## 1. Introduction

Research has shown that academic procrastination is very common among university students: almost all occasionally procrastinate in one or another domain of their studies, and approximately every second student regularly procrastinates (Rothblum, Solomon & Murakami, 1986; Steel, 2007). However, research in this area often lacks precision in the definition of procrastination, with the concept being used to describe different types of delay varying from functional to dysfunctional (e.g., Klingsieck, 2013; Schraw, Wadkins & Olafson, 2007; Steel, 2007). An example of functional procrastination is a situation in which a student studies effectively and attains favourable results under pressure of an approaching deadline (e.g., Choi & Moran, 2009; Chu & Choi, 2005; Schraw et al., 2007). Examples of dysfunctional procrastination are delaying the decided time for beginning study processes, moving scheduled study periods for the future and engaging in study-irrelevant behaviour (e.g., Schouwenburg, 1995). The different and even contrasting definitions of procrastination have made it difficult to understand the phenomenon and to follow the research. Further, the definitions' lack of precision also influences the way researchers operationalise these constructs and the analyses they perform. To address this pervasive problem, Klingsieck (2013) recently provided an excellent meta-analysis of the different definitions of procrastination and of the trends in procrastination research. She suggests that a clear distinction should be made between procrastination and *strategic delay*, in other words, between dysfunctional and functional forms of delay. Klingsieck (2013) proposed that the following seven parameters be used for this purpose: 1) the delay of an overt or covert act; 2) the act is intended to be started and/or completed; 3) the act is necessary or of personal importance; 4) the delay is voluntary; 5) the delay is unnecessary or irrational; 6) the act is delayed despite being aware of the potential negative consequences; and 7) the delay is accompanied by subjective discomfort or other negative consequences. According to Klingsieck (2013), parameters 1 and 2 characterise any form of delay, and 3 and 4 both procrastination and strategic delay. What differentiates procrastination from strategic delay is the nature of the delay itself. The delay in procrastination is unnecessary, irrational and even harmful (5). In strategic delay, a student is confident that the positive consequences will eventually outweigh the potential negative ones, whereas procrastination involves negative consequences and is accompanied by subjective discomfort or other negative consequences (6 and 7). To summarise, "there is no functional form of procrastination, but there is a functional form of delay" (Klingsieck 2013, 26), in other words, strategic delay.

In the light of Klingsieck's distinction, research that has emphasised the adaptive forms of procrastination (e.g., Choi & Moran, 2009; Chu & Choi, 2005; Ferrari, Johnson & McCown, 1995; Schraw, et al., 2007) could be considered as research on strategic delay. Choi and colleagues (Choi & Moran, 2009; Chu & Choi, 2005) have used the terms 'passive' and 'active' procrastination. By passive procrastination they refer to postponing tasks "until the last minute because of an inability to make the decision to act in a timely manner" (Choi & Moran, 2009, 196). Their definition of active procrastination fits Klingsieck's (2013) definition of strategic delay where students are highly motivated by time pressure, and are able to complete tasks before deadlines and achieve satisfactory outcomes. Thus, typical of active procrastinators is a preference for working under pressure (Chu & Choi, 2005). Corkin, Lu and Lindt (2011) have argued that active procrastination is distinct from procrastination in general, and should be referred to as 'active delay.' Their definition of active delay is very close to Klingsieck's (2013) strategic delay. Corkin et al. (2011) also showed active delay to be associated with adaptive self-regulatory processes and academic achievement, and procrastination to be associated with mastery-avoidance goals and a lack of metacognitive strategy. Finally, Grunschel, Partzek and Fries (2013a) used the term 'purposeful delay,' which can be considered synonymous with strategic delay.

On the basis of this distinction between procrastination and strategic delay, procrastination can be defined as "*the voluntary delay of an intended and necessary and/or [personally] important activity, despite expecting potential negative consequences that outweigh the positive consequences of the delay*" (Klingsieck, 2013, 26). Klingsieck's definition extends Steel's (2007, 65) definition of procrastination as "a prevalent and pernicious form of self-regulatory failure." Strategic delay may be defined here as *the*



*voluntary delay of an intended and necessary and/or [personally] important activity in which positive consequences are believed to outweigh negative consequences in the long run.* From the point of view of individual students, procrastination and strategic delay can be closely intertwined when examining individuals in different study contexts, in different study situations and at different times. Therefore, to understand individual dilatory behaviour more deeply, it is important, as Klingsieck (2013) suggests, to expand the investigation of procrastination from one specific context and cover longer periods of time and different contexts. Furthermore, when exploring the nature of procrastination it is important to take into account the whole procrastination process, from its reasons and contexts to actual procrastination behaviour and its consequences, as in Grunschel, Partzek and Fries (2013b).

The present study aims to empirically test the theoretical model of Klingsieck (2013), in which strategic delay is separated from procrastination, by using a qualitative theory-driven and person-oriented approach. As a starting point we use the above-mentioned definitions of procrastination and strategic delay. In addition, the study aims to explore motivational, volitional and situational factors related to procrastination and strategic delay.

### 1.1 Motivational, volitional and situational factors that promote procrastination

Theoretical approaches in procrastination research vary (Klingsieck, 2013). The present study focuses on the motivational-volitional and situational dimensions of procrastination. Researchers have identified many motivational-volitional and situational factors that accompany procrastination. Low intrinsic study motivation, problems in self-regulation, poor time-management and/or organising skills and weak self-efficacy beliefs have been shown to be key factors in leading to procrastination (e.g., Grunschel et al., 2013a; Lee, 2005; Pychyl, Morin & Salmon, 2000; Rebetez, Rochat & Van der Linden, 2015; Steel, 2007; Strunk, Cho, Steele & Bridges, 2013; Tice & Baumeister, 1997; Wolters, 2003). Many studies have shown a link between procrastination and both extrinsic motivation and a lack of motivation (Grunschel et al., 2013b; Lee, 2005; Pychyl et al., 2000; Rebetez et al., 2015; Tice & Baumeister, 1997). Lack of self-regulation has also been shown to increase procrastination (e.g., Steel, 2007). Self-regulation refers to a student's own active role in his or her learning process (e.g., Pintrich, 1995; Vermunt & van Rijswijk 1988; Vermunt & Verloop, 1999; Zimmermann, 1994). Characteristic of self-regulation is monitoring one's actions, using metacognition, and regulating motivational and emotional states (e.g., Pintrich, 1995; Zimmerman, 1994). If these important skills are missing or if they are poorly developed, it is more difficult for a student to control his or her cognition, motivation, actions and emotions (Pintrich, 1995), and this lack of control can promote procrastination. Students who lack self-regulation skills often struggle alone, whereas students with good self-regulation skills are able to seek help for their study-related problems (Newman, 1994; Pintrich, 2004).

Klassen, Krawschuk and Rajani (2008) interestingly showed that low *self-efficacy for self-regulation* was a stronger predictor of the tendency to procrastinate than poor self-regulation skills or weak self-efficacy beliefs alone, or other motivation variables. According to them, self-efficacy for self-regulation “reflects an individual's beliefs in his or her capabilities to use a variety of learning strategies, resist distractions, complete schoolwork, and participate in class learning” (p. 918). They showed that “self-efficacy to structure the learning environment [...] leads to timely task completion and successful academic achievement” (Klassen, et al., 2008, 922).

Furthermore, problems in self-regulation, together with underachievement and the avoidance of tasks seen as demanding, are characteristic of a self-handicapping strategy (e.g., Eerde, 2003; Garcia & Pintrich, 1994; Howell & Watson, 2007), which in turn has been shown to be related to procrastination (Ferrari & Tice, 2000; Solomon & Rothblum, 1984; Steel, 2007). Self-handicapping is a cognitive strategy, which concerns avoiding effort, and in this way preventing potential failure from lowering self-esteem. For persons applying a self-handicapping strategy, avoiding effort is a way to make good performance less likely and to protect their sense of self-competence (Jones & Berglas, 1978). Furthermore, typical of such a strategy is maladaptive task-irrelevant behaviour and a preference for external regulation in which responsibility for the



learning process is shifted to the teacher (Heikkilä & Lonka, 2006). In addition, achievement goals are related to procrastination, and can be divided into mastery and performance goals. Mastery goals focus on developing new skills, whereas performance goals focus on demonstrating ability and skills (e.g., Ames & Archer, 1988; Elliot & Harackiewicz, 1994). Strong achievement goals have been shown to reduce procrastination, whereas having weak or no achievement goals increases procrastination (Howell & Buro, 2009). Further, the effect of achievement goals on study process and study success seems to be mediated by students' self-efficacy beliefs. The higher the students' perceived self-efficacy is, the higher they set their goals, which in turn leads to better academic achievement (e.g., Cheng & Chiou, 2010).

Solomon and Rothblum (1984) found that both fear of failure and feeling the task at hand to be disagreeable caused procrastination. In the case of fearing failure, procrastination has been explained by traits such as perfectionism, anxiety and low self-efficacy beliefs regarding one's skills in organizing and regulating oneself in order to succeed at specific tasks (e.g., Bandura, 1997). Experiencing a task as disagreeable has been explained by problems in time management. Fear of failure, low self-efficacy beliefs, task aversiveness and laziness have all been repeatedly mentioned as factors leading to procrastination (e.g., Blunt & Pychyl, 2000; Eerde, 2003; Ferrari & Tice, 2000; Howell & Watson, 2007; Rothblum et al., 1986; Wolters, 2003).

## 1.2 Aims of the study

The present study has two objectives. Firstly, we aim to empirically test the theoretical model of Klingsieck (2013), in which strategic delay is separated from procrastination, by using a qualitative theory-driven and person-oriented approach. Secondly, we aim to clarify on how motivational, volitional and situational factors are related to procrastination and strategic delay. The purpose is to explore *long-term dilatory behaviour*, i.e., procrastination and strategic delay, among university students during the first study year. Because research on academic procrastination has mainly focused on short-term, task-related procrastination, knowledge about long-term dilatory behaviour is scarce. There are, however, a few interesting exceptions. A good example of a long-term research design is Wäschle, Allgaier, Lachner, Fink and Nückles (2014): long-term procrastination and its relation to self-efficacy among university students were investigated using self-monitoring protocols during an academic term. The present study extends long-term dilatory behaviour to the whole academic year.

## 2. Methodology

### 2.1 Participants

The participants comprised Bachelor-level humanities and law students (N=28) from the University of Helsinki, whose study pace had been slow during their first academic year. These individuals lacked at least a quarter of the credits students at the university are expected to earn each year. Students earning less than 46 credits during their first year must submit a report to the university regarding their slow study pace, and create a detailed plan for future studies. The 46-credit limit is also the minimum requirement for receiving government-financed study grants, which are an important student benefit. We applied purposive sampling and invited these students to participate in interviews after their first year of study.

Two sample groups were assembled. The first consisted of humanities students from the Faculty of Arts, where graduation times are the longest (more than four years), and the second consisted of students from the Faculty of Law, where the average graduation times are the shortest (approx.. three and a half years). In addition, the two Bachelor curricula are different in nature: the law curriculum is professional,



comprised mainly of law studies with few optional courses, whereas humanities students can freely choose their minors and there are fewer compulsory elements.

A total of 154 humanities students were enrolled in three Bachelor of Arts undergraduate programs, of whom 27 (17.5%) had earned less than 46 credits. Of these 27 students 17 (63%) volunteered to be interviewed. Their mean age was 24 years, ranging from 20 to 36. Altogether 27% of these participants were male and 73% female. Male students were slightly over-represented in the sample, their proportion of the whole cohort being 23%.

A total of 247 law students were enrolled in Bachelor of Law undergraduate program, of whom 36 students (15%) had earned less than 46 credits. Of these 36 students, 11 (31%) volunteered to be interviewed. Their mean age was 22.5 years, ranging from 20 to 26. Altogether 55% of these participants were male and 45% female. Similarly to the humanities sample, male students were over-represented, their proportion of the whole cohort being 43%. In the Results section, the humanities students are referred to as H, and law students as L.

## 2.2 Materials

Research on procrastination has mainly applied quantitative approaches in which the data have been collected through various self-report instruments. To our knowledge, only four studies have applied a qualitative approach in order to explore procrastination or delay in academic studying (Grunschel et al., 2013b; Klingsieck, Grund, Schmid & Fries, 2013; Patrzek, Grunschel & Fries, 2012; Schraw et al., 2007). These studies vary in their definitions of procrastination and in their qualitative methodological designs. Furthermore, Schraw et al. (2007) questioned whether self-report instruments could capture all of the possible dimensions of procrastination and therefore chose a qualitative approach. We also opted for a qualitative approach, but applied it differently compared to the four above-mentioned qualitative studies. Our study's sample comprised students whose study pace had been slow during their first university year, but we did not particularly ask the students whether, when or how they procrastinated. Instead, we used in-depth interviews to explore the study processes as well as the expectations, experiences, interest and motivation of students who had studied slowly during their first year. Further, we applied a qualitative person-oriented approach (e.g., Vanthurnout, 2011), meaning that we used individual students as units of analysis. Interviewing university students after their first study year made it possible to expand the scope of our investigation of procrastination and strategic delay from individual assignments or courses to a whole academic year.

The participants volunteered to be interviewed after their first study year. The data collection was approved by the faculties. The students were informed that the results of the study would be used to enhance the program design and the development of the teaching-learning environments. The students gave their informed consent to participate in the study and were told that they could withdraw from it at any time.

The interviews concentrated on three broad themes, which were based on previous research on motivational, volitional and situational factors related to dilatory behaviour. The first two explored the motivational and volitional dimensions of dilatory behaviour, whereas the third focused on the situational dimensions, as follows:

- a) Students' evaluations of themselves as university students, their study aims and future goals, motivation to study, and study success,
- b) Descriptions of the students' study processes and practices, and
- c) Experiences of the teaching-learning environment.

Contrary to Klingsieck et al. (2013) and Grunschel et al. (2013b), we did not specifically ask for the students' views, explanations or definitions of procrastination. Instead, the interviews focused on their aims, study processes, evaluations and experiences of their first study year, and thus 'circled around' the





phenomenon. By doing so we wanted to ensure that the students' spontaneous and personal views were heard, and that our questions did not steer the students to explore their first study year specifically from the point of view of procrastination. Consequently, our interviews were longer and less structured than those of Schraw et al. (2007), Klingsieck et al. (2013) and Grunschel et al. (2013b). The fourth and fifth authors acted as interviewers; the fourth author interviewed the law students and the fifth the humanities students. The length of the interviews varied from approximately forty minutes to an hour, and the interviews were transcribed verbatim. For each profile, the most typical and representative extracts were selected. The selected extracts were translated into English. Due to this translation process, the extracts do not represent authentic spoken English. To ensure the anonymity of the interviewees, the age and gender of the participants are not revealed. All students are referred to as 'she'.

### 2.3 Procedure

We applied a theory-driven approach in which we used Klingsieck's model (2013) as a theoretical basis for the study. We developed the analysis process by using the model of deductive content analysis by Elo and Kyngäs (2008) as the starting point. All five authors were involved in the analysis process, which consisted of four phases. During Phase 1 the data were prepared for the analysis and the unit of analysis was defined. As we applied a person-oriented approach, we used individual students or whole interviews as units of analysis. We also developed a categorisation matrix in which criteria were created for the seven parameters (Table 1). Klingsieck's descriptions of the seven parameters of her model were quite short, which presented several obstacles with respect to our theory-driven approach. Therefore it was important to create more explicit criteria. Most challenging was to devise criteria for parameters 4 and 5, more precisely to define the difference between *voluntary* and *unnecessary* delay. Defining this difference was particularly important, because according to Klingsieck, parameters 3 and 4 represent strategic delay and parameters 5 to 7 procrastination. In addition, 'unnecessary' and 'irrational' in the description of the parameter 5 seemed very different from each other, which made this parameter quite broad in nature. Finally, it was important to define what we meant by 'act'. We defined it as study activities, processes, assignments and tasks during the first study year, in other words, not as a specific study task at a course level.



Table 1.

*The categorisation matrix. Criteria for the seven parameters for the theory-driven data analysis.*

Klingsieck's seven parameters of delay (2013).	Criteria
1) An overt or covert act is delayed.	Evidence of delay, e.g., a low number of credits, unfinished courses, or not following timetables and not meeting deadlines.
2) The start or the completion of the act is intended.	Evidence of studies having been started and no evidence of dropping out from the program.
3) The act is necessary or of personal importance.	At least one of the following elements: intention to graduate from university, commitment to studying or graduating, interest in studying or motivation to study.
4) The delay is voluntary and not imposed on oneself by external matters.	No evidence of external reasons for the delay, such as sickness or family crisis.
5) The delay is unnecessary or irrational.	Evidence of possibilities to act or choose another way to proceed in studying, such as working fewer hours, spending less time on hobbies, or using more time for studying. No evidence of clear reasons for the delay.
6) The delay is achieved despite being aware of its potential negative consequences.	Evidence of the awareness of possible negative consequences. <i>Awareness is explicitly stated.</i>
7) The delay is accompanied by subjective discomfort or other negative consequences.	Evidence of subjective discomfort or of negative consequences. <i>Discomfort is not necessarily expressed by using only negative words. Therefore, jokes and laughing are scrutinized within their contexts.</i>

*Note. Additional criteria for Phase 3 are presented in italics.*

In Phase 2 the categorisation matrix was used to review all data parameter by parameter. The first and fifth authors independently analysed the interview transcripts of all 28 students by checking each of the seven parameters of Klingsieck's model one by one, moving from the first parameter to the seventh. Each interview transcript was therefore analysed independently by these authors in a cycle of seven rounds. In each round the data were coded for correspondence with criteria for each parameter. For example, for





parameter 1 ‘An overt or covert act is delayed’ we coded all data segments in the interviews, which showed evidence of delay of an act, i.e., delay of study activities, processes, assignments or tasks during the first study year. The pieces of evidence were, for example, unfinished courses, not following timetables or not meeting deadlines. The two authors then compared their findings, and were unanimous about all participants having fulfilled the parameters 1 to 3: all students had delayed an overt or covert act (1), and intended to start and/or complete the act (2). It was also clear that the act had been necessary or of personal importance to all students (3). In addition, the two authors were unanimous regarding the voluntary versus involuntary nature of students’ dilatory behaviour (4). Despite difficulties in creating criteria for ‘unnecessary’ or ‘irrational’ dilatory behaviour (5), the comparisons concerning this showed no differences between the two authors. However, the authors differed slightly regarding parameters 6 and 7. In some cases, it had been difficult to evaluate whether a student had been aware of the potential negative consequences (6). For Phase 3 we clarified the criteria for this parameter so that a student’s awareness needed to be explicitly stated, and thus not inferred by the authors. Furthermore, the two authors discussed criteria for ‘subjective discomfort and other negative consequences’ (7). In most of the cases, parameter 7 was easy to evaluate, although a number of problematic instances were found in which students had laughed and/or joked about their dilatory behaviour. Thus, subjective discomfort seemed to be sometimes disguised by joking. The criteria for parameter 7 was further specified so that joking or laughing about dilatory behaviour needed to be scrutinized within their contexts, and that individual jokes would not automatically fulfil this parameter. At the end of this phase, all authors agreed on the adjusted criteria.

Phase 3 concentrated only on parameters 4 to 7, because the previous phase showed that each participant undoubtedly met parameters 1 to 3. The 17 interviews transcripts of the humanities students were independently analysed by the second author, and the 11 interview transcripts of the law students were analysed by the fourth. The analysis results were then compared and discussed between all authors.

In Phase 4 the student profiles were created, with all authors being involved. This phase concentrated particularly on analysing the individual profiles of students who met the criteria for strategic delay, but not all of the criteria for procrastination.

### 3. Results

#### 3.1 The three dilatory profiles

The first aim of the study was to empirically test Klingsieck’s model (2013), in which strategic delay and procrastination differ from any kind of delay in that the delay must be voluntary. The analysis revealed that one humanities student did not meet this criterion, because the slow progress of her studies due to external factors, more precisely, by unexpected family crises. Altogether ten participants (37%) comprising six humanities and four law students, perfectly fit into Klingsieck’s characterization of strategic delay (i.e., parameters 1 to 4). This profile was named *Strategic delayers*. The following extract was very typical of the students in this profile:

*Well, it [slow study pace] was mainly because of my own choices, I mean how to use your time...whether to study or go to work and so on, hobbies as well. They are just my own choices. Of course the other school [completing studies at another university] affected, and partly also the fact that some courses took place simultaneously. (Student H5)*

Four students met all seven parameters of Klingsieck’s (2013) model. These students were aware of the negative consequences of delay. Further, their delay was unnecessary or irrational:

*I don’t know how the others...maybe they just are able to study and make it work, I can’t. In one course I should have completed two essays, but I just couldn’t do the other one at*



*all. I finished one essay and got a poor grade, but that other...it was just, I just could not start. I even talked to the teacher and got good advice on how to start and what points to include, but somehow everything just vanished from my head. Now I doubt whether I can ever succeed in writing essays, but I just have to try. (Student H13)*

In addition, all four students expressed subjective discomfort, as the following extract shows:

*I'm independent and ambitious, but I easily get nervous and lose self-confidence. Then I start feeling that I cannot do this, and that I'd just like to leave everything...or is it wise to spend all my time on this and just go crazy. So I dropped out from many courses and felt like a loser. (Student H8)*

Interestingly, 13 students' profiles (48%) could not be determined as representing either Strategic delayers or Procrastinators. Of these, seven students met the first six parameters meaning that these students were aware of the potential negative consequences of their dilatory behaviour, but had not experienced subjective discomfort or other negative outcomes. This was the only aspect separating these students from the four who met all seven parameters. We therefore created a *Procrastinators* profile consisting of two subgroups: *Procrastinators not expressing subjective discomfort* (n=6; 22%) and *Procrastinators experiencing subjective discomfort* (n=4; 15%). This can be seen as following Klingsieck's model, because she mentions that procrastination *often* entails subjective discomfort or negative consequences, but not always. The subgroup *Procrastinators not expressing subjective discomfort* consisted of one law and five humanities students, and the subgroup *Procrastinators experiencing subjective discomfort* consisted of three humanities and one law student. Despite the negative consequences of their unnecessary delay, *Procrastinators not expressing subjective discomfort* did not exhibit anxiety or stress:

*I'm really bad in doing anything independently. Maybe I do some assignments, but I don't read much of the literature, which I should be able to do in this field. I'm also too lazy to reserve time for that. For example, I feel now so tired that there is no way I'm going to the library even though I should. Instead, I go home and do anything else but study. Maybe at some point I do some studying – a little [laughs]. (Student H6)*

Finally, the remaining seven students met the parameters 1 to 5: their dilatory behaviour had been unnecessary or irrational, which was not characteristic of the Strategic delayers' profile. These students had the possibility to choose another way to proceed in their studying, such as working fewer hours, spending less time on hobbies, or using more time to studying. However, there was no evidence of subjective discomfort and of being aware of potential negative consequences, which were typical of the Procrastinators' profile. These seven students seemed to fall between the Strategic delayers and Procrastinators, forming another profile we termed *Unnecessarily delaying students* (n=7, 26%). Two students represented humanities and five law. The following extract was very typical of them:

*I'm doing OK and have liked it here [at the Faculty of Law], but it was quite a surprise how much one should read and study for exams. I've had many other things to do, work and hobbies. I kept up my study pace quite nicely during the fall semester, but in the spring I started to slip. I realised too late that I didn't start early enough and hadn't read enough for the exams. (Student L1)*

Figure 1 summarises how Klingsieck's seven parameters (2013) were met in the humanities and law students' dilatory profiles. Parameters 1 to 3 were met in all profiles. Strategic delayers met parameters 1 to 4 and Unnecessarily delaying students parameters 1 to 5. The first subgroup of Procrastinators, i.e., Procrastinators not expressing subjective discomfort, met parameters 1 to 6, and the second subgroup of Procrastinators, i.e., Procrastinators experiencing subjective discomfort, met all seven parameters.

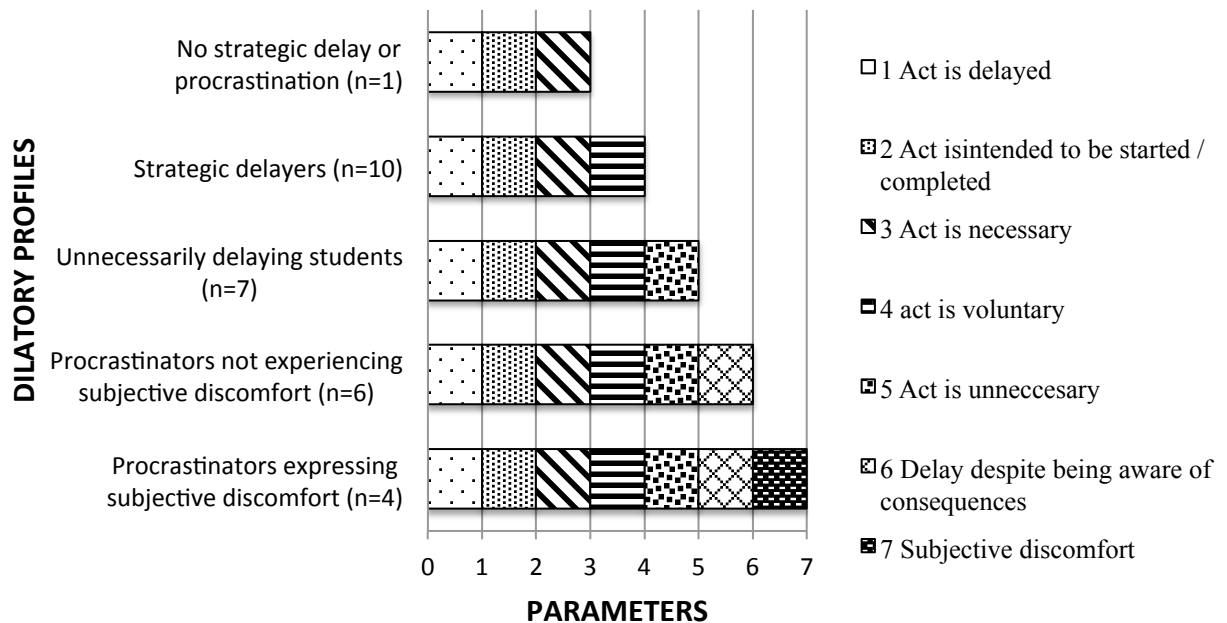


Figure 1. The dilatory profiles created on the basis of Klingsieck's (2013) seven parameters (N=28).

### 3.2 Motivational, volitional and situational factors related to strategic delay and procrastination

The second aim of the study was to explore how motivational, volitional and situational factors are related to procrastination and strategic delay. Next, we explore each dilatory profile in more detail from the point of view of these factors.

#### 3.2.1 Strategic delayers

The *Strategic delayers'* evaluations of themselves as students, their study experiences, and their experiences of the teaching-learning environment were positive. Their strong volition was expressed by good self-regulation and time management, as shown in the following extract:

*I think I have good time-management skills, because I have been able to do a lot of sports and work while studying. I think there is a nice balance now and I'm quite happy about what I'm able to do in one week. I try to plan my schedule about a month ahead.* (Student H2)

Some students had encountered minor difficulties in self-regulation or time management, but had already sought help or changed their study practices after reflecting upon their life situation and study plans, which also reflects volition:

*At the beginning of the fall semester I lost my study rhythm, but now I have found a good one. I realised that I couldn't be successful in studying while both working part-time and doing a lot of sports, so I had to lessen my exercising hours.* (Student L9)

The students in this profile were able to describe their study processes and practices in greater detail than those in the other profiles. Furthermore, strategic delayers seemed to be more successful at combining their studies with family and/or working life. All Strategic delayers also showed personal interest in studying as well as intrinsic motivation. The following extract is very representative of this profile:



*I chose this field as a result of my own personal interests. The subject has interested me through my whole school history. It was one of my favourite subjects at school. In addition, I'm devoted to a hobby, which even increases my interest in studying, because it gives me a personal perspective on this field. (Student H9)*

### 3.2.2 Unnecessarily delaying students

*Unnecessarily delaying students* shared the same positive study experiences and high interest and motivation with strategic delayers, but seemed to show weaker volition, as the following typical extract shows:

*There seems to be all kinds of disrupting factors...I'm sometimes not in the right mood to study effectively. It's difficult to describe this feeling, it's a kind of lack of being able to concentrate...I would say that my biggest problem is to begin reading. After I have started, then it becomes easier, but then something interrupts my studying again. (Student L11)*

Typical of *Unnecessarily delaying students* was also a discrepancy between their own study objectives and the actual study practices, in other words an intention-action gap:

*I'm very good at making plans, but quite poor at executing them. I try to allow myself free time as well, but studying seems to steal it. I try to use my time effectively, but because I work part-time, it's often difficult to really have enough time for everything. (Student H16)*

While Strategic delayers had succeeded through their time management and self-regulation in combining studies, family life and work, *Unnecessarily delaying students* had more difficulty doing so, which resulted in slower study progress.

### 3.2.3 Procrastinators

Selecting one's own field of study had not been a clear or easy task for the students in both subgroups of the *Procrastinators* profile. These students had selected their major subjects either on the basis of success in this subject in high school, or because they could not decide upon a better option. They might also have seriously considered other disciplines before finally deciding, as the following extracts indicate:

*When I realised that I don't have the skills and ambition [to reach my dream profession], I created a backup plan. I thought of different options, but this field has been my choice for a couple of years now. (Student H6, subgroup Procrastinators not expressing subjective discomfort)*

Furthermore, most students did not have clear plans for the future, as the following extract shows:

*Well, it's not very convincing [future employment]. Everyone asks me what I'm going to become when I graduate, and I cannot answer. Maybe something. Maybe a rare type of expert, but who could hire someone like that? (Student H13, subgroup Procrastinators experiencing subjective discomfort)*

Time management was also difficult for all students in this profile:

*Just thinking about a calendar gives me the creeps. So I didn't have a calendar, because I felt it would control my life. However, I finally gave in very reluctantly, and started to use a mobile calendar. That, however, was actually a good thing, because when it beeps it reminds me of things. Maybe I just feel that others have more free time than I have. Maybe others are just better at organising. Because I'm less focused as a person, my use of time is not efficient, and I realise that. (Student H12, subgroup Procrastinators not expressing subjective discomfort)*



Procrastinators had also missed lectures and stopped attending some courses. Further, their study experiences seemed less positive than those of the first two dilatory profiles. However, the subgroups differed from each other in terms of their study experiences in that *Procrastinators experiencing subjective discomfort* expressed more negative emotions and had less positive experiences than *Procrastinators not expressing subjective discomfort*.

Clear differences were noted between the two subgroups in self-efficacy beliefs, experienced stress and study motivation. *Procrastinators experiencing subjective discomfort* were less motivated to study than *Procrastinators not expressing subjective discomfort*:

*The most important reason for my lowered interest was a feeling of strain or burden. Now when I think about it logically, there were no clear reasons for that feeling, but what can you do about your feelings?* (Student H3, subgroup Procrastinators experiencing subjective discomfort)

Furthermore, *Procrastinators experiencing subjective discomfort* seemed to lack the ability to evaluate their own knowledge and skills, whereas *Procrastinators not expressing subjective discomfort* had a more realistic view of themselves as students, describing themselves honestly and in a manner that showed no without anxiety or stress:

*Lazy. Aimless. Floating. So I'm not the kind of person who has clear long-term objectives. I could be more active. In high school I liked that someone was watching and monitoring me. At university I should also have someone with authority to push me forward. You know, it's too easy here to think that I will do this the next year, so delaying is not that harmful. I know that some students succeed at being efficient and organized, but I'm not the only one like this.* (Student H12, subgroup Procrastinators not expressing subjective discomfort)

The first study year of *Procrastinators experiencing subjective discomfort* had been much more difficult than they had anticipated, and they were puzzled by the problems that had arisen. The vicious circle of procrastination resulted from a combination of lack of regulation skills, high workloads, lack of interest, low self-efficacy beliefs, and exhaustion, as the following typical extract indicates:

*From primary to upper secondary school I was a really good student, but now I feel that I can't learn anything about any topic. This depresses me. I don't have enough time to really learn something, and that feels bad. Maybe I'm aiming too high, and when I can't reach my aims, I get depressed.* (Student L4, subgroup Procrastinators experiencing subjective discomfort)

The students were unevenly distributed in the profiles in terms of their discipline, except for the profile Strategic delayers, in which about 37% of both humanities and law students belonged. The humanities students were over-represented in both Procrastinators subgroups. Almost half of the law students belonged in the profile Unnecessarily delaying students whereas only 13% of the humanities belonged in this profile.

#### 4. Discussion

The present study empirically tested Klingsieck's (2013) theoretical model, and provided support for the suggestion to differentiate procrastination from strategic delay. Interestingly, our results showed that dilatory behaviour is even more complex than Klingsieck suggests. Our in-depth qualitative analyses revealed forms of dilatory behaviour lying somewhere between procrastination and strategic delay, that do not meet the criteria for either strategic delay or procrastination: Unnecessarily delaying students showed no





awareness of potential negative consequences and did not exhibit subjective discomfort, and Procrastinators not expressing subjective discomfort did not meet Klingsieck's (2013) seventh criterion of subjective discomfort or other negative consequences. In addition, the results interestingly showed only a small percentage of students meeting all seven criteria of procrastination, making this form of dilatory behaviour the least common in our data.

The Strategic delayers had good self-regulation and time-management skills as well as self-efficacy for self-regulation, which was shown by Klassen et al. (2008) to impede procrastination. These students also exhibited strong achievement goals as well as interest and intrinsic motivation with respect to studying, all of which has been shown by Howell and Buro (2009) to reduce procrastination. Furthermore, they exhibited good metacognitive and reflective skills in evaluating and developing their study processes and practices. These students' dilatory behaviour was due to their life situations and how they had prioritised their study tasks.

Unnecessarily delaying students were also motivated to study and showed an interest in their majors, as was the case with Strategic delayers. Many had quite clear study plans as well. However, typical of these students was an intention-action gap: they often could not execute their study plans, which indicates problems in self-regulation and time management. This is in line with studies showing a relation between self-regulation problems and dilatory behaviour (e.g., Corkin et al., 2011; Wolters, 2003).

Both subgroups of the Procrastinators profile lacked self-regulation and time-management skills, had low self-efficacy for self-regulation, and interest in their major subject was lower than that of the two other profiles. They also lacked intrinsic motivation and clear goals. However, Procrastinators not expressing subjective discomfort seemed more motivated and interested than Procrastinators experiencing subjective discomfort. These factors are in line with research showing that low intrinsic study motivation, problems in self-regulation, poor time-management skills and weak self-efficacy beliefs to be key factors in promoting procrastination (e.g., Grunschel, et al., 2013a; Lee, 2005; Pychyl, et al., 2000; Steel, 2007; Strunk, et al., 2013; Tice & Baumeister, 1997; Wolters, 2003).

Procrastinating students often mentioned personal characteristics when explaining their slow study pace, which could indicate trait procrastination (Schouwenburg, 1995). This is consistent with research that has emphasized the maladaptive nature of procrastination (e.g., Pychyl, et al., 2000; Schouwenburg, 1995; Solomon & Rothblum, 1984; Steel, 2007). Shraw et al. (2007) have reported that some students postpone their studying because of fatigue and burnout.

Wäschle et al. (2014) showed that low goal achievement decreased perceived self-efficacy and increased procrastination. According to them, this might be due to both an expectation of repeated failure as well as negative emotions, which was also evident in our 'procrastinating' students. Wäschle et al. (2014, 112) further showed that "instead of increasing their learning and raising cognitive strategy use, these students tended to irrationally postpone their studying." The procrastinating students in our study also seemed to 'freeze' instead of act when confronting study problems, thus indicating a self-handicapping strategy (Eerde, 2003; Garcia & Pintrich, 1994; Howell & Watson, 2007).

Other interesting differences were found between the humanities and law students. As mentioned earlier, the average graduation time in humanities is longer than in law. Our results were in line with this, because the percentage of humanities students was higher in the Procrastinators profile, whereas that of the law students was higher in the Unnecessarily delaying students profile. The difference is probably due to situational factors: the law curriculum consists largely of mandatory legal courses and leaves little freedom of choice, whereas humanities students must make their own decisions concerning their minors. Thus the results suggest that having the freedom to choose between numerous possibilities may promote procrastination, particularly for students with low self-regulation skills. However, because of the small sample size, we cannot make any generalisations of the relation between study context and the nature of dilatory behaviour.








Our study has several limitations. The number of participants was quite low and the students represented a narrow range of academic disciplines, i.e., humanities and law. In addition, even though our qualitative approach and means of data collection were chosen deliberately, it is possible that memory distortion may have affected our data. Utilising the experience-sampling method developed by Csikszentmihalyi, Larson and Prescott (1977) combined with interviews might have improved the participants' memories of their first study year. Pychyl et al., (2000) have successfully applied this method in procrastination research. Another option would have been to complement interviews with other kinds of self-report methods, such as self-monitoring protocols (Wäschle et al., 2014) or learning diaries. However, as all previously mentioned data-collection methods are based on self-reports, it would be important in the future to complement self-report data with evaluations by tutors or study counsellors. It is also possible that errors were made in assigning students to dilatory profiles. However, we tried to minimise the errors by involving all five authors to independently assign students to the dilatory profiles.

Much of the research to date on procrastination and dilatory behaviour has applied mainly quantitative approaches and has focused on short-term procrastination. Our theory-driven, person-oriented approach and our focus on long-term procrastination yielded a profound understanding of factors related to slow study progress among university students. In our view, future research into dilatory behaviour should endeavour either to be qualitative or use mixed-method or multi-method designs. In this way it is possible to better capture the richness and variation in dilatory behaviour.

The results of the study can be applied to support the individual study paths of university students. The results imply that students representing different dilatory profiles need different kind of support during their studies. While Strategic delayers might do well in a study environment offering ample alternatives and a freedom of choice, for Unnecessarily delaying students this kind of an environment can be more harmful. Unnecessarily delaying students can benefit from support for developing their self-regulation and time-management skills. Further, the results indicate that Procrastinators would have needed help from the beginning of their university studies, and during the spring term the latest, because the harmful effects procrastination were clearly visible after the first study year. These students' self-efficacy beliefs had already weakened and they had started to doubt their skills, motivation and interest in their study fields. Therefore, it is important to develop such study-counselling practices that can help diagnosing and solving students' study problems at an early stage.

## Keypoints

-  The study empirically tested Klingsieck's (2013) theoretical model, and provided support for the suggestion to differentiate procrastination from strategic delay.
-  A qualitative approach can better capture the richness of dilatory behaviour.
-  The theory-driven, person-oriented approach and the focus on long-term procrastination yielded a profound understanding of factors related to slow study progress among university students.

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